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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/773,876	01/31/2001	Robert J. Winchester	57005-A-PCT-US/JPW/AJM/AP	7963

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11/19/2004

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EXAMINER

SCHWADRON, RONALD B

ART UNIT

PAPER NUMBER

1644

DATE MAILED: 11/19/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/773,876

Applicant(s)

WINCHESTER ET AL.

Examiner

Ron Schwadron, Ph.D.

Art Unit

1644

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
 - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
 - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
 - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 18 and 19 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 18 and 19 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. ____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date ____ | 6) <input type="checkbox"/> Other: ____ |

1. Claims 18 and 19 are under consideration.
2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

3. Claims 18 and 19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over D'Apuzzo et al. in view of Gerard et al. (US Patent 6,537,764) for the reasons elaborated in the previous Office Action. Applicants arguments have been considered and deemed not persuasive.

D'Apuzzo et al. teach that CXCR4 is the receptor for SDF-1 (see abstract). D'Apuzzo et al. teach that SDF-1 stimulates a B cell response on human B cell lines via interaction with CXCR4 (see Figure 4). D'Apuzzo et al. teach that the addition of anti-CXCR4 antibody blocks SDF-1/CXCR4 mediated B cell responses (see Figure 4 and 1789, first column). Thus D'Apuzzo et al. demonstrate that antiCXCR4 antibody inhibits activation of CXCR4 receptor by SDF-1, wherein the B cell response requires CXCR4 activation (eg. SDF-1/CXCR4 interaction) to take place. D'Apuzzo et al. do not teach use of said method with a non-peptidyl agent. Gerard et al. disclose nonpeptide inhibitors of chemokine function are well known in the art as is the desirability to identify such compounds (see columns 22-24, wherein column 23, second paragraph discloses nucleic acid or organic compounds). The art recognized that chemokines are involved in a variety of leukocyte functions related to inflammation(see column 1, third paragraph).

D'Apuzzo et al. disclose that the SDF-1/CXCR4 interaction is involved in leucocyte migration (see page 1792, first column). It would have been prima facie obvious to one of ordinary skill in the art at the time the invention was made to have created the claimed invention because D'Appuzzo et al. teach the claimed method except for use of the assay to screen non-peptidyl agents whilst Gerard et al. disclose nonpeptide inhibitors of chemokine function are well known in the art as is the desirability to identify such compounds. One of ordinary skill in the art would have been motivated to do the aforementioned in order to identify inhibitors of the SDF-1/CXCR4 interaction that would inhibit leukocyte migration wherein said migration is pertinent to inflammation and inflammation is pertinent to a wide variety of different diseases (autoimmune diseases, etc.).

Regarding applicants comments, D'Appuzzo et al. teach the claimed method except for use of the assay to screen non-peptidyl agents whilst Gerard et al. disclose nonpeptide inhibitors of chemokine function are well known in the art as is the desirability to identify such compounds. D'Apuzzo et al. disclose that the SDF-1/CXCR4 interaction is involved in leucocyte migration (see page 1792, first column). One of ordinary skill in the art would have been motivated to do the aforementioned in order to identify inhibitors of the SDF-1/CXCR4 interaction that would inhibit leukocyte migration wherein said migration is pertinent to inflammation and inflammation is pertinent to a wide variety of different diseases (autoimmune diseases, etc.). In addition, Gerard et al. disclose that chemokines are involved in the inflammatory response (see column 1, third paragraph) and the desirability of identifying chemokine inhibitors which can be further assessed for potential therapeutic use (see column 3, penultimate paragraph). While Gerard et al. largely addresses CCR3, in view of the fact that both CXCR4 and CCR3 are inflammatory chemokines, it would have been desireable to screen for inhibitors of CXCR4 for largely the same reasons that it was desireable to screen for inhibitors of CCR3 (eg. because they are both involved in inflammation and inflammation is pertinent to a variety of disease states).


4. No claim is allowed.

Art Unit: 1644

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ron Schwadron, Ph.D. whose telephone number is 571 272-0851. The examiner can normally be reached Monday through Thursday from 7:30am to 6:00pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Christina Chan, can be reached on 571 272 0841. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


RONALD B. SCHWADRON
PRIMARY EXAMINER
GROUP 1860 LLW

Ron Schwadron, Ph.D.

Primary Examiner

Art Unit 1644